WEST

| Help | Logout | Interrupt |

| Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences | Cases |

Search Results -

Terms	Documents
L13 and (reach$6 or predict$6 or forecast$6) same medical$3	2

Database:

US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

```
L16 and (probabilit$3 or progress$6)
same tim$3
```

| Refine Search |

| Recall Text | | Clear |

Search History

DATE: Wednesday, June 04, 2003   Printable Copy   Create Case

WEST

[Generate Collection]   [Print]

Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1.   Document ID: US 5712984 A

L16: Entry 1 of 2   File: USPT   Jan 27, 1998

US-PAT-NO: 5712984
DOCUMENT-IDENTIFIER: US 5712984 A
** See image for Certificate of Correction **

TITLE: System for funding future workers' compensation losses

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image |

☐ 2.   Document ID: US 5613072 A

L16: Entry 2 of 2   File: USPT   Mar 18, 1997

US-PAT-NO: 5613072
DOCUMENT-IDENTIFIER: US 5613072 A

TITLE: System for funding future workers compensation losses

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image |

[Generate Collection]   [Print]

Terms	Documents
L13 and (reach$6 or predict$6 or forecast$6) same medical$3	2

Display Format: [–]   [Change Format]

Previous Page   Next Page

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ		
L16	L13 and (reach$6 or predict$6 or forecast$6) same medical$3	2	L16
L15	L9 and (reach$6 or predict$6 or forecast$6) same medical$3 same (recuperat$6 or stabiliz$9)	0	L15
L14	L13 and (reach$6 or predict$6 or forecast$6) same medical$3 same (recuperat$6 or stabiliz$9)	0	L14
L13	L12 and (person$6 or individual$6 or human$6) same (injur$3 or impair$6 or disable or disabilit$3)	5	L13
L12	L9 and (money$ or moni$3 or amount or valu$6)	85	L12
L11	(money$ or moni$3 or amount or valu$6) same (person$6 or individual$6 or human$6) same (injur$3 or impair$6 or disable or disabilit$3) same (reach$6 or predict$6 or forecast$6) same medical$3 same (recuperat$6 or stabiliz$9)	0	L11
L10	L9 and (money$ or moni$3 or amount or valu$6) same (person$6 or individual$6 or human$6) same (injur$3 or impair$6 or disable or disabilit$3) same (reach$6 or predict$6 or forecast$6) same medical$3 same (recuperat$6 or stabiliz$9)	0	L10
L9	claim$6 same asses$6 same model$6	174	L9
L8	(probabilit$3 or progress$6) same tim$3 same(injur$3 or impair$6 or disable or disabilit$3) same reach$6 same medical$3 same (recuperat$6 or stabiliz$9)	0	L8
L7	L2 and progress$6 same tim$3 same(injur$3 or impair$6 or disable or disabilit$3) same reach$6 same medical$3 same (recuperat$6 or stabiliz$9)	0	L7
L6	(bod$3 or corps or corpor$6) same progress$6 same tim$3 same(injur$3 or impair$6 or disable or disabilit$3) same reach$6 same medical$3 same (recuperat$6 or stabiliz$9)	0	L6
L5	(human$6 or person$6) same (bod$3 or corps or corpor$6) same progress$6 same tim$3 same(injur$3 or impair$6 or disable or disabilit$3) same reach$6 same medical$3 same (recuperat$6 or stabiliz$9)	0	L5
	DB=USPT; PLUR=YES; OP=ADJ		
L4	L2 and (human$6 or person$6) same (bod$3 or corps or corpor$6) same progress$6 same tim$3 same(injur$3 or impair$6 or disable or disabilit$3) same reach$6 same medical$3 same (recuperat$6 or stabiliz$9)	0	L4
L3	L2 and human same bod$3 same progress$6 same tim$3 (injur$3 or disable or disabilit$3) same reach$6 same medical$3 same (recuperat$6 or stabiliz$9)	0	L3
L2	(5613072 or 6223164 or 6032678 or 5845254 or 4975840 or 6059724)	100	L2
L1	(5613072 or 6223164 or 6032678 or 5845254 or 4975840).pn.	5	L1

●   ●

WEST

☐ | Generate Collection | | Print |

L13: Entry 2 of 5   File: USPT   Jan 27, 1998

DOCUMENT-IDENTIFIER: US 5712984 A
** See image for Certificate of Correction **
TITLE: System for funding future workers' compensation losses

Abstract Text (1):
A system funds future losses incurred by an insurance carrier on active workers'
compensation insurance claims. Statistical models are used to predict future costs and
durations of claims. The statistical models are generated by applying statistical
analysis techniques to representative historical insurance claim data with the aid of a
professional statistician. Forecasting accuracy is improved by generating several
models wherein each model represents a predefined type of insurance claim. Each model
is applied to active claims of the corresponding type to obtain cost and duration
predictions for those claims. A total cost prediction for a claim is proportioned among
various cost categories to more accurately reflect actual and predicted claim costs.
For each claim, a reserve amount is calculated which is the predicted cost minus the
amount of money paid to date on the claim. Balancing of the respective reserve amounts
computed for active claims is achieved by use of a hypothetical fund which transfers
reserve money from overpredicted claims to the reserves of underpredicted claims. A
total reserve amount is calculated for each claim, and an aggregate reserve amount is
calculated for all the carrier's active claims. The aggregate reserve amount is used to
set a loss reserve account maintained by the carrier to fund future losses incurred on
those claims. A system computer and program generate the statistical models. A
carrier-accessible computer houses the models for application to active claims. A
carrier host computer stores and updates the active claims of the insurance carrier.

Brief Summary Text (5):
Because of the statutory requirements, and also because of purely economic reasons,
such as maintaining solvency, it is desirable for workers' compensation insurance
carriers to be able to maintain a loss reserve amount which corresponds as closely as
possible to the actual ultimate liability from workers' compensation claims. Due to the
inherent uncertainty in predicting or forecasting such prospective liabilities, reserve
amounts maintained by carriers are very likely to substantially exceed or substantially
underestimate the actual ultimate costs incurred on such workers' compensation claims.
Such disparities between predicted losses and actual losses annually cost workers'
compensation insurance carriers, overall, millions of dollars. For example,
California's Insurance Rating Bureau has published statistics to the effect that
California insurance carriers have been underreserving at an overall rate of 15% on
maintained loss reserves over the period from 1985 to 1989. Computed on $677 million in
policy holders' dividends paid out by California carriers in 1989, a 15% error rate for
reserves equates to an approximately $101 million error. Also, underreserving results
in artificially high dividend payments to employers, potential insolvency of the
insurance carrier itself due to insufficient reserves to pay current obligations, a
showing of artificially high company profits because of the failure to show true
losses, and inaccurate computation of insurance premiums. Overestimation of loss
reserves can cost an employer dividend dollars and will overinflate the employer's
experience modification resulting in an artificial increase in premiums charged in
subsequent years.

Brief Summary Text (12):
In applying the models, the significant characteristics of each active claim are
analyzed by an appropriate model to generate a cost and duration prediction for each
such claim. A hypothetical fund is maintained in order to balance cost predictions
between respective claims by providing additional money to underpredicted claims and
taking money away from substantially overpredicted claims. Costs incurred on claims are
separated into a number of cost categories and cost predictions are proportioned among
the cost categories to predict in which areas costs are more likely to be incurred.

Reserves are computed for each cost category and the amounts in each reserve may be reproportioned among the cost categories to more accurately reflect actual costs incurred on a claim.

Brief Summary Text (13):
A total reserve is calculated for each claim as the sum of the individual reserve amount of the respective cost categories. An aggregate reserve is calculated as the sum of the reserves of all active claims. The aggregate reserve is used to set a loss reserve account which is used to fund future losses incurred by the insurance carrier on its active workers' compensation claims.

Drawing Description Text (12):
FIG. 11 is a sample claim summary chart showing the predicted cost and duration values for a hypothetical claim.

Detailed Description Text (3):
FIG. 1 is a diagram of the overall funding system for using an insurance carrier's historical claim data to create statistical models and for using the models to predict future incurred costs and durations for that carrier's active workers' compensation claims. An insurance carrier transfers its historical workers' compensation claim data 10 for the previous 10-year period into an ASCII format carrier data file 14. The carrier data file 14 is transferred and loaded onto a system computer 18 maintained and operated by an organization which provides the funding system service to insurance carriers, or, alternatively, operated internally by an insurance carrier. The historical claim data 10 is analyzed and statistical techniques are applied to the data 10 to create statistical models 22 which are later used to predict future costs and durations of the carrier's active workers' compensation claims. In this regard, a professional statistician 26 applies various statistical analysis techniques to the claim data 10 in order to create the statistical models 22. Once the models 22 have been created, the models 22 are installed onto a computer at the insurance carrier's facility. Preferably, this computer is a personal computer 28 dedicated solely to the funding system. The insurance carrier maintains and updates its records on its active workers' compensation claims 30 as a matter of course on a host computer 34 which is typically a multi-function main frame computer maintained by the carrier. Updating of old claims and inputting of new claims is done via keyboard input terminals connected to the host computer 34. The dedicated personal computer 28 which stores the statistical models 22 and the host computer 34 which stores the active claims data 30 are connected via standard data links 42. In order to obtain cost and duration predictions for its active workers' compensation claims, the insurance carrier sends its current active claims data to the models 22 maintained in the personal computer 28. The statistical models 22 operate upon the active claims data 30 and generate loss reserve and duration predictions which are used to calculate a reserve for each individual claim as well as an aggregate reserve amount for all of the carrier's active workers' compensation claims. The aggregate reserve amount is used to set a loss reserve account 46 for funding future losses on the workers' compensation claims.

Detailed Description Text (38):
With respect to the INJURY TYPE variable, an insurance industry-wide, standard classification system is used. This injury classification system is set forth in each individual state's Workers' Compensation Unit Statistical Plan. Under this system, 1=industrial-related death, 2=100% total permanent disability, 3=major partial (25%-99%) permanent disability, 4=minor partial (1%-24%) permanent disability, 5=temporary total or temporary partial disability, 6=medical expenses only, 7=minor injuries handled in groups via contracted medical services, and 8=closed death claim.

Detailed Description Text (42):
FIGS. 4, 5, and 6 are more detailed flow charts of the statistical model creation step 108 of FIG. 2. Model creation begins with the review of the historical claims file provided by the carrier. The review serves two main purposes: to cleanse the data and to familiarize the analyst with the data. Due to the likelihood that large quantities of data will contain numerous errors, whether reporting, clerical, computational or otherwise, the claim records data must undergo a preliminary quality control analysis which searches the data of each individual claim record for errors. Recognizable errors include variables containing invalid codes, inconsistent codes, improper negative values, illogically high dollar values, etc. For a statistical analyst, or statistician, to become familiar with the data, extensive exposure to the content of the data is required. Questions like the amount of missing data, range of dollar values, diversity in INJURY TYPEs, etc., are answered which provide the basis for understanding the underlying nature of the data. This review process assures that

corrupt data does not pass by the analyst's scrutiny.

Detailed Description Text (43):
The review process is initiated in a step 140 by reading the historical file using a
statistical applications program such as SAS. Procedures within SAS provide summary
statistics for all variables in the file. The summary statistics produced by SAS
include, but are not limited to, means, variances, correlations, minimums and maximums
for continuous variables (e.g., dollar fields), and contingency tables (both one-way
and multi-way) for discrete variables (e.g., BODY PART). In a step 144, a statistician
reviews the SAS-produced output for data reasonableness. Invalid codes are identified
by comparing codes in a carrier-provided data dictionary (which describes the contents
of the file and valid codes which may be assigned to specific fields) with the values
found by SAS. Inconsistent codes are identified by cells within contingency tables
which should be empty (e.g., open claims showing a date of closing) and by inconsistent
combinations of INJURY TYPE and dollars paid fields (e.g., medical only type claims
should not have dollars paid toward indemnity).

Detailed Description Text (44):
Improper negative values include negative values found in most all fields. For example,
costs incurred on workers' compensation claims may be separated into four basic "Cost
Categories." These four Cost Categories are total indemnity, total vocational
rehabilitation expenses, total medical costs, and total allocated expenses. Allocated
expenses include miscellaneous costs such as court costs, attorneys' fees, etc. For the
purposes of the present funding system, closed claims having no costs incurred are not
used in model generation. To this end, closed claims having a total claim cost equal to
zero, thus indicating no money having been paid out on any of the four Cost Categories
for that claim, are flagged. More specifically, claims are flagged where the sum of the
total indemnity, total vocational rehabilitation expenses, total medical costs, and
total allocated expenses is zero.

Detailed Description Text (45):
Illogically high dollar values are typically paid out values (e.g., TOTAL-MEDICAL)
exceeding rational amounts given the nature of the injury. Inaccurate totalling of cost
fields is identified by constructing aggregate individual cost values by adding up the
components which constitute the particular aggregate cost. Thus, the data cleansing
process strives to check the quality of the carrier's historical claims file.

Detailed Description Text (46):
The data review process leads to the identification of claim variables which do not
meet expected values. Cross verification of redundant and/or similar variables within a
given claim often resolves data problems. In a step 148, the carrier may be contacted
to verify or rectify questionable values. Should resolution of "bad data" prove
insurmountable, the claim is flagged for future review. It may later be decided to
recode values with acceptable replacements in a step 152 (e.g., the mean for the same
type of claims or a missing value flag), or, ultimately, the claim may be deleted from
further analysis in a step 156. Accordingly, the resolution process may be repeated
depending upon the available resolution options and the resulting impact on modeling
integrity. Thus, ultimate "bad data" resolution is left to a professional statistician.

Detailed Description Text (48):
To the extent that all data integrity issues have been resolved, the culmination of the
review process leads to the generation of an analysis ready data set. SAS is programmed
to extract data from the Carrier Data File for analysis. In most states the analysis
ready data set may include claims from a number of insurance carriers. This is because
a single carrier may not possess enough claims data for model development purposes. The
extraction incorporates logic to resolve data problems where possible, generates
additional variables through redefinition/combination of existing variables (e.g.,
lower back BODY PART where the claim was LITIGATED), adjusts dollar values for
inflation using the Consumer Price Indices (CPI) as provided by the Bureau of Labor
Statistics (BLS) for local area and major industry, and, in a step 160, splits the file
into subfiles, based upon claim INJURY TYPE, and reformats the resulting subfiles to
more efficiently interface with subsequent analysis software.

Detailed Description Text (49):
Since the data in the claim records comprising the initial analysis ready data set are
taken from claims administered by the carrier over the most recent 10-year period, the
various monetary amounts paid out on those claims are a result, to a significant
extent, of inflationary factors. For example, a claim for an injury which occurred in

1980 would have significantly less paid out amounts than an otherwise identical claim which occurred in 1989. Thus, in order to obtain accurate cost predictions for claims (duration is not effected by inflationary factors), all cost values for the claims in the various claim record sets must be deflated so as to represent the respective costs of each claim as if each claimed injury occurred in the first year of the 10-year claim sample period. Thus, if claim records for injuries occurring for the period 1980 to 1989, inclusive, are used by the program in creating a statistical model, then the costs incurred on each claim must be deflated to yield corresponding 1980 dollar values. In this regard, the Consumer Price Indexes are used to determine appropriate inflation, and hence deflation, values for each appropriate year during the 10-year claim sample period. Inflationary statistics used may be those representing nation-wide inflation or only state-wide inflation, depending upon the desired model application. In most cases, the inflation indexes for the state in which the carrier conducts its business is used, thereby obtaining more reliable cost predictions for that particular carrier's workers' compensation claims.

Detailed Description Text (50):
Derivation of the inflation adjustments for dollar values involves tailoring BLS supplied CPI's to better reflect inflation activity in workers' compensation costs. Each claim's total cost is adjusted according to the components of the total costs. For example, the medical portion of total cost is adjusted using a medical price index; the indemnity portion of total cost is adjusted using an indemnity price index; etc. The price indices are extracted from BLS publications for local area and industry behavior. Thus, the inflation compensation procedure employed more accurately represents the economic activity applicable to each specific claim. Assuming a sufficient amount of available raw claim data, in a step 164, the program randomly divides each of the INJURY TYPE specific subfiles into two groups; one data subset is for model development and the other data subset is for model accuracy assessment. The relative portions split into the model development data subsets and the model accuracy assessment data subset is carrier dependent. However, the minimum proportion split into each model development data subset is 80% of the claims supplied by the insurance carrier for the corresponding INJURY TYPE. For example, a minimum of 80% of the reported medical only claims are selected for the model development data subset for medical only claims; a minimum of 80% of the reported minor partial permanent disability claims are selected for the model development data subset for minor partial permanent disability claims; etc. Preferably, the minimum sample size of a model development data subset (denoted N) is determined by:

Detailed Description Text (62):
In addition, in a process step 183, ANalysis Of VAriance (ANOVA) techniques, described in section 1.3 of Draper & Smith, are used by the statistician to determine the significance levels of variables in predicting claims costs and durations. ANOVA is a technique whereby the amount of variation in claim cost and duration explained by each claim characteristic is quantified and compared to the total variation in cost and duration. The goal is to identify those variables or combination of variables which explain the bulk of the variation in claim cost and duration. Included in the process step 183 is a test for the adequacy of the model. Examination of residuals (actual cost/duration minus predicted cost/duration) for their consistency with model assumptions helps determine the quality of the generated model. Plotting the residuals provides a means for visually analyzing and measuring the quality of the model. Interpretation of the plots is left to the professional statistician. If a variable is judged by the statistician to be significant for purposes of claim cost and duration prediction in a decision step 187, it is incorporated into the model in a process step 191. Otherwise, that variable is ignored in a process step 195.

Detailed Description Text (65):
The univariate (1 variable) regression analysis described above establishes the structure of the remaining analysis. In a process step 211, the system examines the effectiveness of various combinations of variables in predicting claims costs and durations. The statistically significant individual variables identified during the univariate analysis, or Significant Characteristics, form the set of variables which may be combined to more effectively predict claim costs and durations. The particular combinations of variables selected for regression analysis are determined by the statistician based upon experience and expert knowledge in the field. For example, with respect to any given data subset, the analyst may instruct the system computer to perform a regression analysis on all claims in that given data subset which were litigated (LITIGATED="yes") and wherein the injured body part was the claimant's spinal cord (BODY PART=23). The statistician may also, for example, instruct the system to perform a regression analysis on the claims in a given data subset wherein the

claimant's birth year was prior to 1930 (DATE OF BIRTH<1930) and wherein the vocational rehabilitation expense is greater than $1,000 (TOTAL V. R.>1,000).

Detailed Description Text (66):
With respect to each regression analysis performed by the statistician, the results of the analysis are shown to the statistician, preferably on a computer screen. The results of the regression analysis indicate to the statistician the extent to which the variable combination(s) has had an impact on the ultimate incurred costs and/or duration for the analyzed claims in the given data subset. The respective importance of the variable combinations is tested using ANOVA and their future usefulness determined accordingly in a process step 213. If the impact of a given variable combination is small or not statistically significant, as determined by the statistician in a decision step 217, then the regression analysis results on that variable combination may be ignored in a process step 221. If, however, in the decision step 217, a given variable combination is determined to significantly predict ultimate total incurred claims costs or durations for a given data subset, then that particular regression analysis is stored by the system in a process step 225 to be used to forecast the future incurred costs on active workers' compensation claims having the same INJURY TYPE. Individual variables or variable combinations which are so used by the program are called Significant Characteristics.

Detailed Description Text (67):
The functional form (linear, log, etc.) determined by the univariate analysis is employed in this multivariate (multiple variable) regression framework. The content of the equation and how well it predicts is also determined by the professional statistician. Starting with only a mean value (an intercept), variables are systematically added to the equation, both individually and in combination with others (discussed below in further detail). The process of repeating the procedure of adding, subtracting and combining variables in the process step 225 continues until the statistician establishes the best fit within the confines of the selected functional form and estimation technique.

Detailed Description Text (69):
FIG. 6 illustrates a flow chart of the development and testing portion of the process step 108. In a process step 250, a cost Intercept Value and a duration Intercept Value is determined for each of the three independent models. Each Intercept Value represents a base cost or duration prediction for that particular model. Preferably, each Intercept Value represents respectively the mean cost/duration value for all claims in the appropriate data subset, and serves as a base value for ultimately calculating a cost (or duration) prediction for that claim. For example, with respect to the major and minor Permanent Disability model for a given insurance carrier, a cost Intercept Value of $88,500 might be calculated as the mean cost incurred for all the claims in the major and minor Permanent Disability claims data subset. With respect to the Medical Only model, the cost Intercept Value will be designated as the average total medical costs incurred for claims in the Medical Only data subset (namely INJURY TYPE=6).

Detailed Description Text (70):
In a process step 254, the regression analyses performed by the system in conjunction with the statistician, whether univariate or multivariate, result in the generation of a positive or negative Intercept Modifier for each respective variable or variable combination which is a Significant Characteristic. During prediction, each Intercept Modifier will be applied to the claims having the corresponding INJURY TYPE. The respective appropriate Intercept Modifiers are added or subtracted from the Intercept Values for each predicted claim depending upon that claim's characteristics to obtain a cost or duration prediction for that claim. In the case of a positive Intercept Modifier for a particular INJURY TYPE, for example Medical Only Claims, the applicable Intercept Modifier is added, for each active claim in that INJURY TYPE having the corresponding characteristic, to the Intercept Value for that INJURY TYPE to obtain an ultimate predicted Total Cost Incurred for that active claim. Similarly, with respect to negative Intercept Modifiers, the applicable Intercept Modifier for a given characteristic or characteristic combination which has been determined using regression analysis to be a Significant Characteristic, is subtracted from the Intercept Value to obtain the Total Cost Incurred prediction for active claims in the same INJURY TYPE which have that characteristic. Appropriate Intercept Modifiers are similarly applied to the predicted duration of claims in order to obtain a claim duration prediction. A sample application of Intercept Modifiers to an Intercept Value to obtain a Total Prediction is shown in the following example:

Detailed Description Text (71):
Once the various Intercept Modifiers have been appropriately added or subtracted to the
cost Intercept Value for the corresponding model, then a Total Cost Incurred prediction
has been determined for that particular claim. Similarly, the duration Intercept
Modifiers are added to or subtracted from the appropriate duration Intercept Value to
obtain a duration prediction for that claim.

Detailed Description Text (72):
In order to appropriately apply the respective models to the data contained in claim
records during the prediction process in the ultimate application of the program, the
predicted cost values (in base year dollars, e.g., 1980) must be reinflated to current
dollar values once they have been determined. Since the predicted cost values are all
determined as if each subject claimed injury occurred in the first year of the subject
10-year sample period (for example, 1980 where the period is 1980-1989), each resulting
cost prediction must be reinflated a minimum of 10 years to obtain present day dollar
values. To this end, all predicted dollar values are inflated to present day dollar
values using the identical publicly available medical, health, and workers'
compensation cost indexes (e.g., CPI) which were previously used to deflate the claim
dollar values to the first year of the claim sample period.

Detailed Description Text (73):
In a process step 258, the previously generated INJURY TYPE specific models are tested
for accuracy. For this testing, the program uses the claim records from the model
accuracy assessment data subsets (see FIG. 4, step 164) which were previously randomly
parsed out from the INJURY TYPE subfiles groups determined to be acceptable or "clean"
(those claims which passed the quality control analysis, or, data integrity testing).
In the process step 258, the three independent models are actually applied to the
Significant Characteristic variable values in the correspondingly independent model
accuracy assessment data subsets to predict the respective costs and durations of these
previously unused claims. The accuracy of each of the models may be precisely
determined because the tested claims have been closed and the actual costs and
durations of those claims are known values. To obtain accurate dollar values for cost
predictions, the appropriate inflationary factors are applied to the predicted values
for each claim in order to convert the starting year dollars into appropriate dollar
values for the respective years in which the respective claimants in those claims were
injured in a process step 262. In determining the accuracy of each respective model,
the predicted costs for the testing sample claims are summed and compared to the sum of
the actual costs for those claims in a process step 266. The resulting ratio provides
an accuracy measure for each model's ability to correctly predict claims costs and
durations. For example, if the predicted aggregate claims costs total $11,000 and
actual aggregate claims costs totaled $10,000, the model has predicted to within 10%. A
corresponding ratio is computed for claims' duration.

Detailed Description Text (78):
Some insurance carriers may wish to access the models on the designated PC on a daily,
weekly, or monthly basis, or upon any other desired frequency. By accessing the models
and applying the models to its most current workers' compensation claim records, the
insurance carrier will obtain the most current and up to date predictions for future
costs and duration on its active workers' compensation claims. It may be desirable for
the carrier to frequently update its claims costs and duration predictions since the
status of and available data on its active workers' compensation claims is dynamic and
continuously changing. Thus, daily access is the preferred method for obtaining the
most up to date prediction values.

Detailed Description Text (81):
The present system includes a means for adjusting the predicted reserve amounts in
accordance with carrier experience and preference. For groups of claims having like
injury years, the insurance carrier may enter into the system a Reserve Adjustment
Factor. The Reserve Adjustment Factor is a multiplier or percentage specified by the
insurance carrier to be added to each claim in the designated claim group or groups.
This multiplier is adjusted on the total reserve amount ultimately calculated for
claims in the designated group. For example, if a carrier has reason to believe that a
given group of claims having a like injury year is likely to incur greater than normal
costs, or if the carrier wishes to pad the reserve amount for those claims as a safety
margin, then the carrier might enter a Reserve Adjustment Factor for that claim group
of, for example, 1.25. This Factor will act as a multiplier to the total calculated
reserve amount such that the reserve amount is increased by 25% for that claim. Reserve
Adjustment Factors may be entered or updated by the carrier at any time by accessing
the system on the dedicated PC.

Detailed Description Text (83):
The present system calculates a separate Reserve amount for each of the four Cost
Categories, namely, medical expenses, indemnity expenses, vocational rehabilitation
expenses, and allocated expenses. For each respective Cost Category, the Reserve Amount
is equal to the predicted cost incurred for that Category, or Incurred, minus the
amount paid to date, or Paid To Date amount, for that Category. Thus, if the total
medical cost, or medical Incurred, predicted by the program is $1,200, and $300 has
been paid out to the claimant to date, then the resulting Reserve amount (medical
reserve) will be $900.

Detailed Description Text (85):
In a decision step 305, the system reviews the Significant Characteristics of each
claim and compares the current Significant Characteristics of the claim to the
corresponding Significant Characteristic values from the previous claim review to
determine if any Significant Characteristics have changed. With respect to old claims
(claims previously reviewed), if any of the Significant Characteristics are different
from their previous values, then the claim is earmarked or flagged for a revised cost
and duration prediction. For example, if the previous value of the variable LITIGATED
(in practice, LITIGATED is always a significant characteristic) was 0 ("no"), and the
current value of LITIGATED is 1 ("yes"), then the system will obtain a revised cost and
duration prediction for that claim since that claim is now being litigated. Similarly,
if BODY PART (injured body part) has changed from its previous value, then a new cost
prediction and duration will be computed based upon this changed value, assuming BODY
PART is a Significant Characteristic. Respecting newly entered claims, the Significant
Characteristics are deemed to be "changed" (i.e., the previous values were all zero)
and thus these are also flagged for a cost and duration prediction. If no Significant
Characteristics have changed from the previous claim review of an old claim, then new
cost and duration predictions are not obtained since the identical predicted cost and
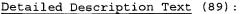duration values would result.

Detailed Description Text (86):
If it was determined in step 305 that one or more Significant Characteristics have
changed for a claim, then the system branches to a decision step 311 to determine
whether the claims involves a death. Where an injured worker has died as a result of a
work-related injury, then the appropriate standard INJURY TYPE classification (see
previous discussion regarding classification system) will be either 1 or 8 (INJURY
TYPE=1 or 8). In this case, appropriate benefits paid to the claimant's heirs are
determined strictly by statute. The terms and parameters of the statute are coded into
the program. Thus, where INJURY TYPE=1 or 8, the system does not resort to the model
for a reserve prediction, but rather is able to determine, in a process step 313, the
actual amount of the statutory death benefits that will be paid to the claimants heirs.
In California, for example, statutory workers' compensation death benefits are set
forth in .sctn.4700 et seq. of the California Labor Code.

Detailed Description Text (87):
If the claim does not involve the death of a worker, then the system branches to a
process step 315 and applies the appropriate model to conduct an initial or a revised
cost and duration prediction analysis for that claim. Here, appropriate Intercept
Modifiers are applied to appropriate Intercept Values in the manner previously
described. As a result, claim cost and duration values are obtained which take into
account the most current information available for that claim. In this respect, the
system continually revises and refines its cost and duration estimates in order to more
accurately designate loss reserve amounts. In conducting a new cost and duration
prediction analysis, the system uses the most current values of the Significant
Characteristic variables.

Detailed Description Text (88):
After the prediction step 315, the predicted Total Cost Incurred amount for each claim
is allocated or proportioned, in a process step 317, among the Incurred values for each
of the four Cost Categories, namely, medical, indemnity, vocational rehabilitation, and
allocated. The amount of money allocated to each of the respective Incurred amounts is
determined by analyzing the cost distribution of previous claims. The system analyzes
the population of closed claims of the same INJURY TYPE to determine how the total
actual costs were distributed among the respective Cost Categories using those claims
having positive values in the same categories. Thus, for example, if a claim has only
medical and indemnity costs, the Total Cost Incurred amount would be distributed to
those two respective categories in proportion to the distribution of total actual costs
to those categories for closed claims having only medical and indemnity costs.

Detailed Description Text (89):
Next, in a process step 323, the program reviews the Paid To Date cost <u>values</u> for each
claim (both for old claims and for new claims) for each of the four Cost Categories.
For each claim, the Paid To Date costs are summed together as a Total Paid to Date
<u>amount</u> which is saved in the claim record.

Detailed Description Text (90):
Next, the system proceeds to compute the actual duration of each claim. The actual
duration is defined as the number of months between the injury date (DATE OF INJURY)
and the current date. In a decision step 329, the system compares whether the actual
duration has exceeded the expected or predicted duration. If this has occurred, then,
in a process step 331, the system will revise the predicted duration <u>value</u> to be
greater than the actual duration by assigning the <u>value</u> of the predicted duration to be
the actual duration multiplied by 1.25. This predicted duration <u>value</u> is stored in the
claim record.

Detailed Description Text (92):
Next, in a process step 335, for claims involving permanent disability (INJURY TYPE=3
or 4), the system determines whether the predicted Indemnity Incurred cost is
sufficient to meet minimum statutory indemnity requirements for that claim. In this
regard, most states have minimum statutory requirements for indemnity payments to
workers' compensation claimants suffering permanent disabilities. For example, .sctn.
4658 of the California Labor Code sets forth in detail the payments to be made to a
permanently disabled claimant in California, and also sets forth the <u>amount</u> of time or
period during which such payments are to be made. The <u>amount</u> of time for which such
payments must be made to the claimant are determined based on a Permanent Disability
Percentage ("PDP"). The PDP is a standardized quantitative representation of the
severity of a claimant's permanent injury. More specifically, the PDP is the relative
<u>amount</u> which the claimant is deemed to be permanently disabled wherein 100% represents
a total permanent disability and 0.25% represents a minimum permanent disability. The
percentage of permanent disability is normally determined by claim examiners based upon
a review of medical reports from treating or evaluating physicians who give opinions on
what disability the injured claimant has suffered. In determining the Permanent
Disability Percentage, factors which are taken into account include the nature of the
injury or disfigurement, the occupation of the injured employee, the injured's age at
the time of injury, and the degree to which the injury diminishes the employee's
ability to perform his or her job or compete in an open labor market. Once a PDP
percentage has been established, the minimum indemnity to which the workers'
compensation claimant is entitled may be precisely determined by application of the
specific terms of the statute (e.g., Cal. Labor Code .sctn. 4658).

Detailed Description Text (93):
In order to be able to easily and rapidly determine such minimum indemnity payments,
the minimum statutory indemnity scheme for permanent disability claimants set forth in
the state workers' compensation statutes are coded into the program. Thus, in the
process step 335, the system is able to determine on its own, by application of the PDP
percentage given in the claim record, the minimum indemnity <u>amounts</u> to which a claimant
is entitled. The system compares the predetermined statutory aggregate minimum
indemnity costs for the claim with the predicted Indemnity Incurred <u>amount</u>. If the
predicted Indemnity Incurred is less than the statutory indemnity, then the system
takes available <u>money</u> out of one or more of the Incurred <u>amounts</u> of the remaining Cost
Categories to satisfy the known minimum cost Incurred <u>amount</u> for the Indemnity Category
(discussed below in further detail).

Detailed Description Text (94):
The system is also able to provide indemnity predictions for total permanent disability
claimants (INJURY TYPE=2). In this case, the <u>amount</u> awarded to the claimant is
specified by statute, the provisions of which are represented in the program. In
California, for example, the award is the injured worker's temporary disability benefit
for life. The award is determined by multiplying the claimant's temporary disability
weekly benefit <u>amount</u> by the claimant's weekly life expectancy, where the PDP=100%.

Detailed Description Text (96):
Next, if the Paid To Date <u>value</u> for a given Cost Category exceeds the predicted cost
Incurred for that Category in a decision step 337, the system administers a
reproportioning process between the four respective Cost Categories of the claim in a
process step 341 (see also FIG. 10). The purpose of reproportioning is to make
adjustments in the predicted or Incurred <u>values</u> of the claim. This is accomplished by

readjusting the predicted amounts in the respective cost Incurred categories to better fit the actual known characteristics (Paid To Date amounts) of that claim. In reproportioning, the program subtracts money from predicted Incurred values where the predicted cost Incurred is greater than the Paid To Date amount for that Category and then adds that amount to the predicted cost Incurred amount for the Category or categories of that claim where the Paid To Date amount exceeds the predicted Incurred amount. The system seeks to provide an Incurred amount greater than the Paid To Date amount, thereby padding the predicted cost Incurred for that Category so as to account for or satisfy future paid out amounts in that Category. The reproportioning in the process step 341 serves to customize or mold the Total Cost Incurred prediction for a given claim to the particular categories where expenditures have occurred for that individual claim. Obviously, reproportioning can only occur within a given claim where the Total Incurred is greater than the Total Paid To Date for that claim.

Detailed Description Text (97):
FIG. 10 illustrates in more detail the reproportioning process of step 341. In a decision step 400, if the medical Paid to Date amount for the claim exceeds the system prediction, as proportioned in step 317, money is taken, in a step 404, from the other cost categories having available reserve dollars (i.e., where the predicted amount exceeds the Paid to Date amount for the Category). An amount of money is taken sufficient to satisfy the medical Paid to Date amount plus a padding amount (for the medical category, 7.12% has been determined to be a statistically preferable padding percentage). Money is taken from other cost categories in proportion to the available reserve amounts from those categories. Thus, if $100 is needed to satisfy the medical Paid to Date plus padding, and the available indemnity reserve is $750 and the available allocated reserve is $250, then $75 is taken from the indemnity reserve and $25 is taken from the allocated reserve. In a decision step 408, if the indemnity Paid to Date amount exceeds the system prediction, money is taken, in a step 412, from other cost categories, which have available reserve amounts. Money is taken from other cost categories in proportion to the respective reserve amounts available and in an amount to satisfy the indemnity Paid to Date amount plus a preferable padding of 8.38%. In a decision step 416, if the vocational rehabilitation Paid to Date amount exceeds the system prediction, money is taken, in a step 420, from other cost categories, which have available reserve amounts. Money is taken from other cost categories in proportion to the respective reserve amounts available and in an amount to satisfy the vocational rehabilitation Paid to Date amount plus a preferable padding of 8.67%. Finally, in a decision step 424, if the allocated Paid to Date amount exceeds the system prediction, money is taken, in a step 428, from other cost categories, which have available reserve amounts. Again, money is taken from other categories in proportion to the respective reserve amounts available and in an amount to satisfy the allocated Paid to Date amount plus a preferable padding of 7.89%. It should be noted that in transferring money from one Cost Category to another in reproportioning, no amount will be taken from a Category that would cause the remaining reserve amount to be less than the corresponding padding percentage. If there is insufficient money available in a claim's Cost Categories for reproportioning, then money is obtained via an artificial Fund as described below.

Detailed Description Text (99):
For each insurance carrier, the system maintains a continuously updated Fund. The Fund is a means employed in order to effect a balancing between the respective claim records for that carrier. The purpose of the Fund is to be able to adjust the predictions for each claim in order to more accurately reflect the actual amounts being paid out on each individual claim throughout the active life of that claim. The Fund balance also acts as an indicator of model accuracy and also whether claims are being over or under predicted.

Detailed Description Text (100):
In a process step 345, if a given claim has been underpredicted, an amount of money is added to that claim to satisfy the Paid to Date amount for that claim. More specifically, a given claim qualifies for Fund dollar adding if the Paid to Date amount for any Cost Category in the claim exceeds the predicted amount for that Category and there are insufficient reserves available in the other cost categories to satisfy the under-prediction via reproportioning in step 341. The exact amount which is added to the claim is also added to the Fund. The amount of money added to the claim is that amount of money needed to equate the Total Incurred amount to the Paid to Date amount, plus an additional amount for padding to satisfy future additional paid out amounts.

Detailed Description Text (101):
In a similar manner, money is subtracted from overpredicted claims and correspondingly

subtracted from the Fund. Money is subtracted from claims whose Paid to Date amounts have not exceeded the predicted Total Incurred and which have reached or exceeded 75% of their predicted monthly duration. The amount of money subtracted from such claims is the percent of available Reserve dollars equal to the percent of predicted months that have expired. Thus, if a claim duration is predicted as 100 months and 80 months have passed since the date of injury, then 80% of the available reserve dollars for that claim are subtracted therefrom which amount is also subtracted from the Fund.

Detailed Description Text (103):
In a decision step 349, the system determines whether a negative total cost incurred prediction has been determined for any claims. Due to the nature of the prediction methods used in the present system, it is possible that a claim will have a resulting negative amount for its Total Cost prediction. In such a case, the absolute value of the negative predicted amount, plus an extra padding amount equal to the mean actual claim cost for claims having the same INJURY TYPE, is added to the Fund in a process step 353 and is correspondingly added to that claim to give a positive predicted Total Cost Incurred for that claim.

Detailed Description Text (104):
Next, in a process step 357, the system determines, with respect to each claim, whether the predicted cost Incurred amounts for each Cost Category and/or the Total Cost Incurred prediction for that claim require modification by a Reserve Adjustment Factor (RAF), assuming an RAF has been designated by the carrier. To do this, the program sets a boolean indicator (INCURRED.sub.-- SAME) to "yes" if three conditions are all true. The first condition is that the Total Cost Incurred claim prediction is the same as the previous Total Cost Incurred prediction for that claim the last time the claim was reviewed. The second condition is that no Significant Characteristics for that claim have changed since the last time that claim was reviewed. The third condition is that the Paid To Date costs in each Cost Category do not exceed the predicted cost incurred amounts for those categories. If all three of these conditions are true, then the boolean indicator INCURRED.sub.-- SAME is set to "no," thus indicating that no significant events have transpired for that claim since its last review. In such a case, the system takes the predicted Total Cost Incurred for that carrier and divides this amount among each appropriate cost Incurred Category for that claim in the same manner as previously described. If, however, one of the three conditions is false, then INCURRED.sub.-- SAME is set to "yes."

Detailed Description Text (105):
If, in a decision step 361, INCURRED.sub.-- SAME is set to "yes," then, in a process step 365, the system will calculate a dollar Reserve amount for each of the four Cost Categories for each claim. The Reserve for each Cost Category is obtained by subtracting the Paid To Date amount for that Category from predicted cost Incurred the for that Category.

Detailed Description Text (106):
If, in the decision step 361, INCURRED.sub.-- SAME is set to "no," then the system branches to a process step 369. In step 369, the system calculates the Reserve for each Cost Category in the same manner as described in step 365. Then, in process step 373, system will apply the appropriate Reserve Adjustment Factor multiplier to the Reserve amount in each Cost Category for the claim to formulate a revised Reserve amount for each category. In a step 377, the revised Reserve amount for each category is added to the corresponding Paid to Date amount to obtain revised Incurred predictions for the Cost Categories in the claim.

Detailed Description Text (108):
Next, in a process step 381, a Total Reserve amount is obtained for the claim by summing the individual revised Reserve amounts of the individual Cost Categories. Additionally, a Total Incurred amount is obtained, in a process step 385, by summing the individual revised Incurred amounts for the respective Cost Categories.

Detailed Description Text (109):
For each claim, the program generates a Claim Summary Screen 451, as shown in FIG. 11 which represents a hypothetical workers' compensation claim. The chart is presented in a format which is preferred for showing to the insurance carrier after the system has generated claim cost and duration predictions. Shown are a Paid To Date column 455, a Reserve column 459, and a Total Incurred column 463. The Paid To Date column indicates the amount of monies paid out on that claim to date for each of the four Cost Categories, i.e., medical 467, indemnity, 471, vocational rehabilitation 475, and allocated 479. The Claim Total Reserve Amount 483 refers to the amount of money which

the insurance carrier needs to set aside in order to be able to fund predicted future
losses incurred on that particular workers' compensation claim.

Detailed Description Text (111):
In accordance with the present invention, the Total Reserve Amount for each of the
carrier's individual active claims are used to determine an Aggregate Reserve Balance.
In addition, however, the Reserve Amount calculated for each claim is stored separately
and may be acceesed individually. This is because the Reserve Amounts on individual
claims or groups of claims, for example all claims from a particular employer, may be
used for purposes such as calculating premiums, generating claims reports, and for
defending the claim reserve amount to the employer. The Aggregate Reserve Balance
represents the overall predicted future costs on the insurance carrier's individual
active workers' compensation claims. The insurance carrier will keep an aggregate Loss
Reserve Account containing money for the purpose of funding its individual workers'
compensation claims losses as they occur. The insurance carrier will continuously
update its Loss Reserve Account to correspond to the aggregate of the Individual Claim
Reserves. Typically, the insurance carrier will initiate monetary transactions to and
from its Aggregate Loss Reserve Account at regular intervals (for example, daily,
weekly or monthly) in order to ensure timely payment and satisfaction of its current
workers' compensation claims expenses.

Detailed Description Paragraph Table (1):

	Injury Type 5 Model
	Intercept Value +$2,537 Intercept Modifiers Body

Part, #42 -92 Nature of Injury, #52 -41 Birth Date Group, #4 +0 Allocated, No +0
Litigated, Yes +710 Total Prediction $3,114

CLAIMS:

1. A method for funding future losses incurred by an insurance carrier on workers'
compensation injury claims, comprising the steps of:

obtaining historical workers' compensation claim data;

separating said historical claims data into data subsets wherein each data subset
comprises claims of a predefined type and wherein each claim is placed into only one
data subset;

generating a statistical model for each of said data subsets wherein each model
represents the costs incurred on claims of said predefined type, and wherein the
generation of each model further comprises the steps of:

applying statistical analysis techniques to the claims in a subject data subset in
order to determine claim characteristics which are significant in affecting the costs
incurred on said claims in said subject data subset;

calculating an intercept value which is a base statistical norm for the cost of said
claims in said subject data subset; and

calculating an intercept modifier for each significant characteristic wherein said
intercept modifier is a value which represents a statistical cost difference between
all claims in said subject data subset and those claims in said data subset having said
significant characteristic; storing said models on a computer at the insurance
carrier's facility;

said computer performing the following steps:

determining said significant characteristics for each of said insurance carrier's
active workers' compensation claims;

providing said significant characteristics of each of said insurance carrier's active
workers' compensation claims as input characteristics to said models to obtain an
individual reserve amount for each particular active claim; and

placing money in a loss reserve account based on said individual reserve amount for
each particular active claim.

8. The method as defined in claim 1, wherein each of said intercept values is the
average cost of said claims in said subject data subset.

13. The method as defined in claim 1, wherein said step of generating a statistical model for each of said data subsets includes the steps of calculating an intercept value and calculating appropriate intercept modifiers for the duration of claims in each data subset.

14. The method as defined in claim 1, wherein said step of applying said models to the insurance carriers active workers' compensation claims includes the steps of:

downloading said active claims to said computer at the insurance carrier's facility;

analyzing said active claims using said models to obtain new or updated claim cost predictions; and

calculating a total reserve amount for each active claim in each data subset, said total reserve amount being computed for each claim as the total cost prediction for that claim minus a total paid to date amount for that claim.

15. A method for funding future losses incurred by an insurance carrier on insurance claims, comprising the steps of:

obtaining historical data on insurance claims having known cost values and which are representative of expected future insurance claims to be funded;

generating one or more statistical models representative of said cost values of said historical insurance claims based upon significant characteristics of said historical insurance claims;

storing and maintaining said statistical models in a memory device on a computer accessible by an insurance carrier;

said computer performing the following steps of:

determining significant characteristics for each particular active insurance claim of said insurance carrier;

applying said models to said significant characteristics of each particular active insurance claim of said insurance carrier to obtain an individual future cost prediction for each particular active claim; and

transferring funds to a loss reserve account for each particular active claim based upon said individual future cost prediction for said particular active claim.

17. A method for funding future losses incurred by an insurance carrier on insurance claims, comprising the steps of:

obtaining historical data on insurance claims having known cost values and which are representative of expected future insurance claims to be funded;

generating one or more statistical models representative of said cost values of said historical insurance claims based upon significant characteristics of said historical insurance claims;

storing and maintaining said statistical models in a memory device on a computer accessible by an insurance carrier;

said computer performing the following steps of:

determining significant characteristics for each particular active claim of said insurance carrier;

applying said models to said significant characteristics of each particular active insurance claim of said insurance carrier to obtain an individual future cost prediction for each particular active claim;

calculating an individual reserve amount for each particular active claim based on the individual cost prediction for each particular active claim; and

placing money in a loss reserve account based on said calculated individual reserve

amount for each particular active claim to fund future losses incurred on said particular active claim.

19. The method as defined in claim 18, wherein said historical claim data is obtained for claims over a period of years, and wherein said step of applying said statistical models includes the steps of:

calculating a cost prediction for an active claim, said cost prediction representing the predicted cost of said claim in currency valued in a first year of said period; and

inflating said cost prediction to currency valued in a current year.

20. The method as defined in claim 18, including the steps of:

determining for a model an intercept value, wherein said intercept value is defined as a value which is used as a base cost prediction for active claims to which said model is applied;

determining intercept modifiers for a plurality of claim characteristics which are significant in affecting claim costs, each said modifier being a value which is added to or subtracted from a cost prediction for an active claim having the corresponding characteristic, the significance of a claim characteristic being determined using statistical analysis techniques; and

calculating a cost prediction for an active claim by summing an intercept value for said claim to intercept modifiers corresponding to the characteristics of said claim.

21. The method as defined in claim 20, wherein said intercept value for said model is a mean cost of all claims in the corresponding data subset for said model.

23. The method as defined in claim 18, wherein said step of applying said statistical models to said active claims includes maintaining a hypothetical fund to balance cost predictions between claims, wherein money is added to underpredicted claims to satisfy paid to date amounts for those claims and an equivalent amount of money is added to said fund, and wherein money is subtracted from substantially overpredicted claims and an equivalent amount of money is subtracted from said fund.

26. The method as defined in claim 18, including the steps of:

specifying a reserve adjustment factor for a claim or for a group of claims, wherein said reserve adjustment factor is a value used to adjust computed reserves upward or downward; and

adjusting computed reserves using said reserve adjustment factor.

30. The method as defined in claim 27, including the steps of:

separating paid to date amounts on an active claim into a plurality of said predefined cost categories;

proportioning said total cost prediction for said active claim among said cost categories;

determining for said claim whether any paid to date amount for a cost category exceeds the corresponding proportioned cost prediction for that cost category; and

reproportioning money from positive reserves in one or more cost categories to cost categories wherein said paid to date amount exceeds said proportioned cost prediction, wherein a reserve for a cost category is equal to the proportioned cost prediction minus the paid to date amount for that cost category.

32. The method as defined in claim 30, wherein said step of reproportioning money from positive reserves comprises adding sufficient money to a cost category to satisfy said paid to date amount for said cost category plus a padding amount to be applied to future amounts paid out in said cost category.

34. A method that calculates a reserve amount for active claims of an insurance company, comprising:

inputting into a first computer system historical data from claims over a predetermined period,

processing and analyzing said historical data in said first computer system to generate a statistical model based upon said historical data, said model based upon significant characteristics of data of a predefined type;

maintaining and updating current active claim data for said insurance company in a second computer system;

receiving said statistical model from said first computer system and current data for active claims of said predefined type from said second computer system into a third computer system;

determining significant characteristics of said current data for said active claims;

applying said model, in said third computer system, to said significant characteristics of said current active data of each particular active claim to generate an individual predicted dollar cost for each particular active claim;

transferring said individual predicted dollar cost for each particular active claim to said second computer system from said third computer system; and

prohibiting access by said insurance company to said first computer system.

37. The method as defined in claim 35, further including the step of establishing a premium for a client of said insurer based upon the total reserve amount for all of said active claims for said client.

39. A method that calculates a reserve amount for active claims of an insurer, comprising:

processing and analyzing historical claims data from an insurer;

generating a statistical model based upon said historical claims data in said first computer system, said model based upon significant characteristics of data of a predefined type;

generating said historical claims data in a second computer system;

receiving and maintaining current data regarding said active claims in said second computer system;

receiving said statistical model generated by said first computer system into said second computer system;

said second computer system performing the following steps:

determining significant characteristics of said current data of each of said active claims;

applying said statistical model in said second computer system to said significant characteristics of said current active data to generate an individual predicted dollar cost for each particular active claim; and

isolating said insurer from said first computer system to prevent said insurer from generating statistical models using said first computer system;

transferring funds to a loss reserve account based upon said individual predicted dollar cost for each particular claim.